DOCUMENT RESUME

ED 345 077 CE 061 171

TITLE	Nursery and Garden Center Worker. Ohio's Competency Analysis Profile.
INSTITUTION	Ohio State Univ., Columbus. Vocational Instructional Materials Lab.
SPONS AGENCY	Ohio State Dept. of Education, Columbus. Div. of Vocational and Career Education.
PUB DATE	Mar 92
NOTE	26p.; For related documents, see ED 338 827-852 and CE 061 142-176.
AVAILABLE FROM	Vocational Instructional Materials Lab, Ohio State University, 1900 Kenny Road, Columbus, OH 43210-1090 ($1.50).
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Agricultural Education; Business Administration; Competence; *Competency Based Education; Employment Potential; Entry Workers; Equipment Maintenance; Greenhouses; *Horticulture; Job Analysis; Job Skills; Marketing; *Nurseries (Horticulture); Occupational Information; Off Farm Agricultural Occupations; Postsecondary Education; Safety; Salesmanship; Secondary Education; Task Analysis; Vocational Education
IDENTIFIERS	DACUM Process; Ohio

ABSTRACT

Developed through a modified DACUM (Developing a Curriculum) process involving business, industry, labor, and community agency representatives in Ohio, this document is a comprehensive and verified employer competency profile for nursery and garden center occupations. The list contains units (with and without subunits), competencies, and competency builders that identify the skills needed to enter these occupations. The occupational, academic, and employability skills for this occupation or occupational area are included. Within the outline are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests. Advancing items identify the knowledge, skills, and attitudes needed to advance in the occupation; futuring items identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation 3 to 4 years from now. Titles of the nine units are as follows: general safety precautions; nursery and garden center operations; equipment maintenance; equipment operation; facility maintenance; marketing and sales; product handling; business management; and employability skills. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED345077

OCAP

OHIO'S COMPETENCY ANALYSIS PROFILE

NURSERY AND GARDEN CENTER WORKER

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Employer Verification Panel

Ron Cramer, *The Siebenthaler Company,* Dayton, Ohio

Sherry Conley, *Natorp Garden Store-East,* Amelia, Ohio

Joseph F. Denes, *Oakland Nursery Inc.,* Columbus, Ohio

Patrick N. Eborall, *Natorp Garden Stores-Central,* Cincinnati, Ohio

David B. Geary, *Willoway Nurseries Inc.,* Avon, Ohio

David P. Richards, *Lake County Nursery Inc.,* Perry, Ohio

William K. Rudy, *Studebaker Nurseries, Inc.,* New Carlisle, Ohio

CE 061 171

Ohio's Future at Work

Division of Vocational and Career Education
Ohio Department of Education

Vocational Instructional Materials Laboratory
Center on Education and Training for Employment

THE OHIO STATE UNIVERSITY

BEST COPY AVAILABLE

What is OCAP?

"A comprehensive and verified employer competency list will be developed and kept current for each program." This is the second objective of Imperative 3 of the *Action Plan for Accelerating the Modernization of Vocational Education: Ohio's Future at Work*. Ohio's Competency Analysis Profile (OCAP) lists are the Division of Vocational and Career Education's response to that objective. OCAP lists evolve from a modified DACUM process involving business, industry, labor, and community agency representatives from throughout Ohio. The OCAP process is directed by the Vocational Instructional Materials Laboratory at The Ohio State University's Center on Education and Training for Employment.

How is OCAP used?

Each OCAP contains units (with and without subunits), competencies, and competency builders that identify the occupational, academic,* and employability skills needed to enter a given occupation or occupational area. Within that outline there are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items will be the basis for questions on the state vocational competency tests (scheduled to begin in school year 1993-94). Advancing items (marked with one asterisk) identify the knowledge, skills, and attitudes needed to advance in a given occupation. Futuring items (marked with two asterisks) identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation three to four years from now.

School districts may add as many units, subunits, competencies, and/or competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees should be actively involved in the identification and verification of additional items. Using OCAP lists, instructors will be able to formulate their vocational courses of study and monitor competency gains via the new criterion-referenced competency testing program that will be directly tied to the competencies identified on the OCAP lists.

***Academic competencies have not been identified for all OCAPs. At a later date math, communication, and science competencies will be released.**

The **Employability Skills** portion of this list was verified by the following employer panel:

Gary J. Corrigan, *Dana Corporation*, Ottawa Lake, Michigan
David Crooks, *Bowling Green State University Union Food Service*, Bowling Green, Ohio
Pat Doerman, *Farrow's Harley-Davidson*, Columbus, Ohio
William Gockenbach, *Kaiser Aluminum*, Heath, Ohio
Patsy Hathaway, *CBS Personnel Services, Inc.*, Dayton, Ohio
Marlyn Harman, *Marlyn Harman & Associates*, Cleveland, Ohio
Thomas R. Hyldahl, *Toledo Edison*, Toledo, Ohio
Carol C. James, *Ohio Contractors Association*, Columbus, Ohio
James Mack, *Chrysler Jeep Assembly*, Toledo, Ohio
Rocky McCoy, *Ironton-Lawrence Co. Community Action Organization*, Ironton, Ohio
James Needs, *Independent Crop Producer*, Upper Sandusky, Ohio
Ronald Simmons, *Former GM Executive*, Warren Ohio

BEST COPY AVAILABLE

Ohio Competency Analysis Profile
Nursery and Garden Center Worker

Unit 1: General Safety Precautions

Competency 1.0.1: Maintain safe work environment

Competency Builders:

1.0.1.1 Read and follow safety information
1.0.1.2 Organize and maintain clean and safe work area
1.0.1.3 Identify hazardous materials and location of material safety data sheets (MSDSs)
1.0.1.4 Comply with greenhouse, shop, and equipment safety rules
1.0.1.5 Complete accident report
1.0.1.6 Recognize environmental issues pertaining to the industry, health administration, Environmental Protection Agency (EPA), Food and Drug Administration (FDA), and state and federal regulations
1.0.1.7 Identify and report safety hazards
1.0.1.8 Correct nonchemical safety hazards
1.0.1.9 Maintain safety devices
1.0.1.10 Monitor regulation updates
1.0.1.11 Comply with controlled product regulations
1.0.1.12 Correct chemical safety hazards*
1.0.1.13 Recognize wastewater requirements**

Competency 1.0.2: Demonstrate safe work habits

Competency Builders:

1.0.2.1 Read and follow label information
1.0.2.2 Wear protective clothing and equipment
1.0.2.3 Use safe lifting and carrying methods
1.0.2.4 Interpret information on signs
1.0.2.5 Check working condition of personal protective equipment
1.0.2.6 Maintain and use slow-moving-vehicle signs
1.0.2.7 Keep riders off mobile equipment
1.0.2.8 Observe safety precautions when applying chemicals and fertilizer
1.0.2.9 Observe safety precautions when storing chemicals and fertilizer
1.0.2.10 Follow personal cleanup procedures after handling chemicals and fertilizer
1.0.2.11 Dispose of chemicals and chemical containers
1.0.2.12 Pass drug test**
1.0.2.13 Complete pesticide absorption test**

* Advancing
** Futuring

Competency 1.0.3: Operate and maintain equipment

Competency Builders:

1.0.3.1 Follow safety rules
1.0.3.2 Observe and comply with safety zones
1.0.3.3 Operate equipment defensively
1.0.3.4 Interpret safety symbols
1.0.3.5 Maintain safety shields
1.0.3.6 Shut down and lock out/tag out power equipment
1.0.3.7 Identify potential equipment safety hazards
1.0.3.8 Follow manufacturer's service recommendations

Unit 2: Nursery and Garden Center Operations

Competency 2.0.1: Demonstrate understanding of nursery and garden center industry

Competency Builders:

2.0.1.1 Identify fields of endeavor
2.0.1.2 Identify economic importance of industry
2.0.1.3 Identify environmental importance of industry
2.0.1.4 Identify employment opportunities
2.0.1.5 Identify continuing-education opportunities
2.0.1.6 Identify professional organizations and trade journals
2.0.1.7 Identify state licensing requirements
2.0.1.8 Identify Ohio Certified Nursery Technician opportunities
2.0.1.9 Recognize importance of just-in-time inventory**
2.0.1.10 Identify wholesale distribution centers**
2.0.1.11 Recognize impact of robotism**

Competency 2.0.2: Examine plant physiology and growth

Competency Builders:

2.0.2.1 Identify plant parts
2.0.2.2 Identify photosynthesis process
2.0.2.3 Identify functions of plant parts
2.0.2.4 Identify plant growth requirements
2.0.2.5 Identify taproot and fibrous root systems
2.0.2.6 Recognize value of hydroponics**
2.0.2.7 Recognize new cultivars**

Competency 2.0.3: Examine plant requirements and value

Competency Builders:

2.0.3.1 Identify hardiness zones
2.0.3.2 Identify landscape value
2.0.3.3 Identify plant environmental preferences
2.0.3.4 Recognize planting and maintenance levels
2.0.3.5 Identify environmental value

* Advancing
** Futuring

Competency 2.0.4: Identify and classify plants

Competency Builders:

2.0.4.1 Classify plants as monocots or dicots
2.0.4.2 Identify common plants according to scientific and common names
2.0.4.3 Classify plants as annuals, biennials, or perennials
2.0.4.4 Identify woody and herbaceous plants
2.0.4.5 Classify plants according to growth habit
2.0.4.6 Identify flowering potted plants
2.0.4.7 Identify foliage plants
2.0.4.8 Identify bulbs
2.0.4.9 Identify wildflowers
2.0.4.10 Identify annual flowers
2.0.4.11 Identify perennial flowers
2.0.4.12 Identify herbs
2.0.4.13 Identify ornamental trees
2.0.4.14 Identify fruit trees
2.0.4.15 Identify shrubs
2.0.4.16 Identify ground covers
2.0.4.17 Identify vegetable plants
2.0.4.18 Identify ornamental grasses
2.0.4.19 Identify shade trees

Competency 2.0.5: Test soil, water, and plant tissues

Competency Builders:

2.0.5.1 Follow general safety precautions
2.0.5.2 Take soil samples
2.0.5.3 Prepare soil samples for testing
2.0.5.4 Take plant samples
2.0.5.5 Prepare plant samples for testing
2.0.5.6 Draw water samples
2.0.5.7 Determine water pH level
2.0.5.8 Interpret test results
2.0.5.9 Determine soil pH level
2.0.5.10 Determine water soluble salt levels*
2.0.5.11 Identify pesticide contamination test procedure**

Competency 2.0.6: Prepare media mixes

Competency Builders:

2.0.6.1 Follow general safety precautions
2.0.6.2 Identify soil types
2.0.6.3 Identify media materials
2.0.6.4 Mix media materials
2.0.6.5 Prepare compost
2.0.6.6 Identify mixing techniques
2.0.6.7 Identify plant waste disposal methods and legislation**

* Advancing
** Futuring

Competency 2.0.7: Prepare for propagation

Competency Builders:

2.0.7.1 Follow general safety precautions
2.0.7.2 Identify containers
2.0.7.3 Identify need for sterilizing equipment and containers
2.0.7.4 Prepare seeds for sowing
2.0.7.5 Match plant requirements to environmental conditions
2.0.7.6 Identify asexual and sexual plant propagation methods
2.0.7.7 Identify state licensing requirements
2.0.7.8 Collect and select seeds, plants, and cuttings
2.0.7.9 Interpret plant and seed tag information

Competency 2.0.8: Prepare planting area

Competency Builders:

2.0.8.1 Follow general safety precautions
2.0.8.2 Prepare planting location
2.0.8.3 Identify and apply soil amendments
2.0.8.4 Determine planting depth
2.0.8.5 Follow planting rate recommendations
2.0.8.6 Recognize Low-Input Sustainable Agriculture (LISA) potential**

Competency 2.0.9: Propagate plants

Competency Builders:

2.0.9.1 Follow general safety precautions
2.0.9.2 Sterilize equipment
2.0.9.3 Plant seeds
2.0.9.4 Divide plants
2.0.9.5 Separate plants
2.0.9.6 Take cuttings
2.0.9.7 Apply rooting hormone
2.0.9.8 Perform grafts and buds
2.0.9.9 Transplant cuttings and seedlings
2.0.9.10 Pot trees and shrubs
2.0.9.11 Plant bare root trees and shrubs
2.0.9.12 Plant balled trees and shrubs
2.0.9.13 Label planted specimens
2.0.9.14 Apply mulch
2.0.9.15 Troubleshoot problems
2.0.9.16 Propagate using tissue culture**

* Advancing
** Futuring

Competency 2.0.10: Fertilize plants

Competency Builders:

2.0.10.1 Follow general safety precautions
2.0.10.2 Identify symptoms of nutrient deficiency
2.0.10.3 Interpret manufacturer's fertilization rate charts
2.0.10.4 Interpret fertilizer bag labels
2.0.10.5 Determine amount of fertilizer and soil amendments to apply
2.0.10.6 Identify application methods
2.0.10.7 Calibrate fertilizer application equipment
2.0.10.8 Mix fertilizer solutions
2.0.10.9 Apply liquid fertilizer
2.0.10.10 Apply dry fertilizer
2.0.10.11 Recognize symptoms of fertilizer injury
2.0.10.12 Maintain fertilization records
2.0.10.13 Determine nutrient requirements*
2.0.10.14 Determine kind of fertilizer and soil amendments to apply*

Competency 2.0.11: Evaluate pest-control program

Competency Builders:

2.0.11.1 Follow general safety precautions
2.0.11.2 Identify insects, diseases, and weeds at various development stages
2.0.11.3 Identify vertebrate pests
2.0.11.4 Recognize pest damage
2.0.11.5 Identify resistant plant species
2.0.11.6 Identify control-resistant insects
2.0.11.7 Determine when controls are needed
2.0.11.8 Calculate area to be covered
2.0.11.9 Evaluate chemical/cultural/biological control options of integrated pest management (IPM)
2.0.11.10 Interpret chemical labels and compatibility charts
2.0.11.11 Select control option
2.0.11.12 Select application method
2.0.11.13 Compute treatment cost
2.0.11.14 Recognize environmental limitations
2.0.11.15 Estimate pest population numbers*
2.0.11.16 Recognize companion planting benefits**

Competency 2.0.12: Apply chemical treatments for pest control

Competency Builders:

2.0.12.1 Follow general safety precautions
2.0.12.2 Calibrate application equipment
2.0.12.3 Mix chemicals
2.0.12.4 Use application equipment
2.0.12.5 Set out bait
2.0.12.6 Clean equipment
2.0.12.7 Maintain application record
2.0.12.8 Recognize chemical injury
2.0.12.9 Assess treatment results
2.0.12.10 Obtain private applicator's license*

* Advancing
** Futuring

Competency 2.0.13: Maintain plants

Competency Builders:

2.0.13.1 Follow general safety precautions
2.0.13.2 Water plants
2.0.13.3 Clean plant leaves
2.0.13.4 Thin seedlings and cuttings
2.0.13.5 Thin and space plants
2.0.13.6 Pinch plants
2.0.13.7 Disbud flowering plants
2.0.13.8 Remove old flowers
2.0.13.9 Identify and apply mulches
2.0.13.10 Cultivate plants
2.0.13.11 Repot plants
2.0.13.12 Stake trees
2.0.13.13 Apply growth-regulating compounds
2.0.13.14 Climatize plants

Competency 2.0.14: Prune plants

Competency Builders:

2.0.14.1 Follow general safety precautions
2.0.14.2 Identify pruning tools
2.0.14.3 Sterilize pruning equipment
2.0.14.4 Determine pruning time
2.0.14.5 Identify structural problems
2.0.14.6 Determine lowest branch height
2.0.14.7 Determine desired shape
2.0.14.8 Identify water sprouts
2.0.14.9 Space branches
2.0.14.10 Select scaffold branches
2.0.14.11 Prune shrubs
2.0.14.12 Root-prune
2.0.14.13 Train central leaders
2.0.14.14 Recognize chemicals for pruning**

Competency 2.0.15: Harvest plants

Competency Builders:

2.0.15.1 Follow general safety precautions
2.0.15.2 Package plants
2.0.15.3 Label plants
2.0.15.4 Clean plants
2.0.15.5 Acclimate plants
2.0.15.6 Grade plants
2.0.15.7 Preserve plant viability
2.0.15.8 Apply antidesiccants
2.0.15.9 Wrap tree head
2.0.15.10 Dig, ball, and burlap shrubs and trees
2.0.15.11 Harvest bare root stock
2.0.15.12 Comply with regulations regarding plant inspection and movement
2.0.15.13 Recognize American Association of Nurserymen (AAN) sizing/grading standards

* Advancing
** Futuring

Competency 2.0.16: Regulate greenhouse environment

Competency Builders:

2.0.16.1 Follow general safety precautions
2.0.16.2 Install shade cloth
2.0.16.3 Apply glass shading compound
2.0.16.4 Control environmental needs
2.0.16.5 Recognize computerized environmental controls
2.0.16.6 Troubleshoot problems
2.0.16.7 Identify robotic impact**

Unit 3: Equipment Maintenance

Competency 3.0.1: Clean and store equipment

Competency Builders:

3.0.1.1 Follow general safety precautions
3.0.1.2 Remove equipment from storage
3.0.1.3 Remove debris from equipment
3.0.1.4 Use steam or high-pressure wash equipment
3.0.1.5 Recognize how to prepare equipment for storage
3.0.1.6 Lubricate equipment for storage
3.0.1.7 Drain fluids

Competency 3.0.2: Use and maintain hand and power tools

Competency Builders:

3.0.2.1 Follow general safety precautions
3.0.2.2 Read and follow operation instructions
3.0.2.3 Identify tools
3.0.2.4 Select tools
3.0.2.5 Set up and adjust tools
3.0.2.6 Clean and lubricate tools
3.0.2.7 Recondition tools
3.0.2.8 Sharpen tools
3.0.2.9 Store tools
3.0.2.10 Troubleshoot problems

Competency 3.0.3: Lubricate equipment

Competency Builders:

3.0.3.1 Follow general safety precautions
3.0.3.2 Identify service points
3.0.3.3 Select lubricant
3.0.3.4 Maintain grease fittings
3.0.3.5 Apply lubricant
3.0.3.6 Clean and lubricate drive parts
3.0.3.7 Dispose of used lubricants

* Advancing
** Futuring

Competency 3.0.4: Service engine electrical systems

Competency Builders:

3.0.4.1 Follow general safety precautions
3.0.4.2 Clean and treat battery terminals, cables, and battery box
3.0.4.3 Replace fuses
3.0.4.4 Replace light bulbs
3.0.4.5 Troubleshoot problems
3.0.4.6 Recognize robotic impacts**

Competency 3.0.5: Service wheels and tires

Competency Builders:

3.0.5.1 Follow general safety precautions
3.0.5.2 Inspect tires
3.0.5.3 Check tire pressure
3.0.5.4 Inflate tires
3.0.5.5 Remove and replace wheels
3.0.5.6 Troubleshoot problems

Competency 3.0.6: Service hydraulic systems

Competency Builders:

3.0.6.1 Follow general safety precautions
3.0.6.2 Select oil
3.0.6.3 Check and add oil
3.0.6.4 Inspect system for oil leaks
3.0.6.5 Inspect hoses
3.0.6.6 Clean hydraulic fittings
3.0.6.7 Troubleshoot problems

Unit 4: Equipment Operation

Competency 4.0.1: Perform prestart functions

Competency Builders:

4.0.1.1 Follow general safety precautions
4.0.1.2 Select fuel
4.0.1.3 Check prestart mechanism
4.0.1.4 Inspect lights
4.0.1.5 Flag extended materials
4.0.1.6 Refuel power units
4.0.1.7 Check fluid levels
4.0.1.8 Check tire pressure
4.0.1.9 Inspect and adjust belts
4.0.1.10 Add coolant
4.0.1.11 Inspect for leaks
4.0.1.12 Select oil
4.0.1.13 Service air cleaner

(continued)

* Advancing
** Futuring

(continued)

4.0.1.14 Identify type of fuel
4.0.1.15 Mix gas and oil for two-cycle engine
4.0.1.16 Troubleshoot problems

Competency 4.0.2: Hitch equipment to power unit

Competency Builders:

4.0.2.1 Follow general safety precautions
4.0.2.2 Connect front-end-operated equipment
4.0.2.3 Connect 3-point-hitch equipment
4.0.2.4 Attach and detach power takeoff equipment
4.0.2.5 Hitch towed equipment
4.0.2.6 Connect and inspect hydraulic lines
4.0.2.7 Connect electrical hookups
4.0.2.8 Connect safety chains

Competency 4.0.3: Operate vehicles

Competency Builders:

4.0.3.1 Follow general safety precautions
4.0.3.2 Adjust throttle for operating conditions
4.0.3.3 Interpret equipment gauges
4.0.3.4 Start and shut down engine
4.0.3.5 Use hand operating signals
4.0.3.6 Operate manual transmission
4.0.3.7 Operate automatic transmission
4.0.3.8 Operate hydrostatic transmission
4.0.3.9 Use braking systems
4.0.3.10 Adjust seating and steering
4.0.3.11 Operate liftgate
4.0.3.12 Operate dump bed
4.0.3.13 Maintain valid driver's license and driving record
4.0.3.14 Operate hydraulics
4.0.3.15 Operate power takeoff
4.0.3.16 Jump-start vehicle
4.0.3.17 Operate boom truck (i.e., cherry picker)*

* Advancing
** Futuring

Unit 5: Facility Maintenance

Competency 5.0.1: Design water delivery system*

Competency Builders:

5.0.1.1 Determine required quantity and quality of water*
5.0.1.2 Compare irrigation methods*
5.0.1.3 Read and interpret performance charts*
5.0.1.4 Select water source*
5.0.1.5 Select components for irrigation system*
5.0.1.6 Draw up distribution system*
5.0.1.7 Identify basic surveying techniques*
5.0.1.8 Identify water management issues**

Competency 5.0.2: Install and maintain water delivery systems

Competency Builders:

5.0.2.1 Follow general safety precautions
5.0.2.2 Tap into existing lines
5.0.2.3 Locate existing underground lines
5.0.2.4 Open and backfill trench line
5.0.2.5 Cut and fit pipe or tubing (e.g., polyvinyl chloride [PVC], aluminum)
5.0.2.6 Install pipe and pipe fittings
5.0.2.7 Install and repair valves and faucets
5.0.2.8 Winterize water delivery systems
5.0.2.9 Maintain filter system
5.0.2.10 Replace gaskets
5.0.2.11 Unclog pipes
5.0.2.12 Troubleshoot problems
5.0.2.13 Install flow-control devices*

Competency 5.0.3: Operate irrigation systems

Competency Builders:

5.0.3.1 Follow general safety precautions
5.0.3.2 Determine sprinkler precipitation rate
5.0.3.3 Adjust sprinkler patterns
5.0.3.4 Operate injection systems
5.0.3.5 Adjust water pressure
5.0.3.6 Program automatic timers
5.0.3.7 Hand-water plants
5.0.3.8 Calibrate injection systems
5.0.3.9 Monitor injection systems
5.0.3.10 Troubleshoot problems
5.0.3.11 Identify computer-driven systems**

Competency 5.0.4: Maintain nursery and greenhouse equipment and facilities

Competency Builders:

5.0.4.1 Follow general safety precautions
5.0.4.2 Clean, fumigate, and sanitize facility
5.0.4.3 Replace plastic covering on greenhouse
5.0.4.4 Clean heating and cooling systems
5.0.4.5 Hang and repair doors
5.0.4.6 Replace windowpanes
5.0.4.7 Follow written assembly instructions
5.0.4.8 Troubleshoot problems

Unit 6: Marketing and Sales

Competency 6.0.1: Determine customer needs and services

Competency Builders:

6.0.1.1 Interpret customer needs
6.0.1.2 Identify available products
6.0.1.3 Recommend products
6.0.1.4 Recommend alternate products
6.0.1.5 Estimate quantity of needed product
6.0.1.6 Estimate total cost of needed product

Competency 6.0.2: Provide technical assistance

Competency Builders:

6.0.2.1 Provide customer with informative materials
6.0.2.2 Interpret product labels
6.0.2.3 Provide care and safety instructions
6.0.2.4 Explain product use
6.0.2.5 Explain safety precautions regarding product use or application
6.0.2.6 Determine extent of product guarantee
6.0.2.7 Address customer complaints

Competency 6.0.3: Demonstrate selling skills

Competency Builders:

6.0.3.1 Maintain product and service knowledge
6.0.3.2 Differentiate different products
6.0.3.3 Examine types of selling techniques
6.0.3.4 Identify types of customers
6.0.3.5 Recognize customer buying motives
6.0.3.6 Recognize customer buying signals
6.0.3.7 Maintain prospective customer relationship
6.0.3.8 Close sale

* Advancing
** Futuring

Competency 6.0.4: Conduct sale

Competency Builders:

6.0.4.1 Greet customers with positive attitude
6.0.4.2 Use salesperson techniques
6.0.4.3 Use telephone techniques
6.0.4.4 Process tax-exempt sales transaction
6.0.4.5 Process charge account sales transaction
6.0.4.6 Process charge card sales transaction
6.0.4.7 Calculate customer discount
6.0.4.8 Complete sales receipt
6.0.4.9 Compute sales tax
6.0.4.10 Close sale
6.0.4.11 Operate cash register
6.0.4.12 Count change
6.0.4.13 Process customer refund
6.0.4.14 Wrap purchases
6.0.4.15 Follow up purchases and sales
6.0.4.16 Handle special orders
6.0.4.17 Sell complementary products

Competency 6.0.5: Maintain company image

Competency Builders:

6.0.5.1 Explain importance of image
6.0.5.2 Identify factors affecting image
6.0.5.3 Project company image

Competency 6.0.6: Price merchandise

Competency Builders:

6.0.6.1 Calculate break-even point
6.0.6.2 Calculate markup
6.0.6.3 Identify psychological effects of pricing
6.0.6.4 Attach price tags
6.0.6.5 Prepare merchandise for inventory or display
6.0.6.6 Identify factors affecting prices*
6.0.6.7 Compare pricing strategies*

Competency 6.0.7: Market products and services

Competency Builders:

6.0.7.1 Locate market information sources
6.0.7.2 Identify products and services to be presented
6.0.7.3 Identify opportunities for publicity
6.0.7.4 Compare types and costs of advertising media
6.0.7.5 Prepare product displays
6.0.7.6 Arrange retail area according to season

* Advancing
** Futuring

Unit 7: Product Handling

Competency 7.0.1: Receive products

Competency Builders:

7.0.1.1 Follow general safety precautions
7.0.1.2 Unload products
7.0.1.3 Interpret packing slips and invoices
7.0.1.4 Check for shipping discrepancies
7.0.1.5 Inspect products for damage
7.0.1.6 Unpack products
7.0.1.7 Group products according to quality and variety
7.0.1.8 Handle products according to type
7.0.1.9 Verify order*
7.0.1.10 Identify use of Universal Product Code (UPC)**

Competency 7.0.2: Deliver products and load customer vehicles

Competency Builders:

7.0.2.1 Follow general safety precautions
7.0.2.2 Attach shipping labels
7.0.2.3 Load items
7.0.2.4 Secure load
7.0.2.5 Arrange product delivery
7.0.2.6 Collect COD orders
7.0.2.7 Unload products
7.0.2.8 Verify customer address

Unit 8: Business Management

Competency 8.0.1: Perform general office duties

Competency Builders:

8.0.1.1 Follow general safety precautions
8.0.1.2 Duplicate materials
8.0.1.3 File materials
8.0.1.4 Prepare reports
8.0.1.5 Use telephone
8.0.1.6 Operate calculator
8.0.1.7 Use two-way radio
8.0.1.8 Operate personal computer
8.0.1.9 Interpret computer printouts
8.0.1.10 Use FAX machine
8.0.1.11 Schedule appointments and meetings
8.0.1.12 Open business facility
8.0.1.13 Close business facility
8.0.1.14 Balance cash drawer
8.0.1.15 Plan work schedules*

* Advancing
** Futuring

Competency 8.0.2: Conduct general banking procedures*

Competency Builders:

8.0.2.1 Prepare funds for bank deposit*
8.0.2.2 Make bank deposit*
8.0.2.3 Write check*
8.0.2.4 Endorse check*
8.0.2.5 Balance bank statement*
8.0.2.6 Identify use of debit card**

Competency 8.0.3: Control inventory

Competency Builders:

8.0.3.1 Organize storage area
8.0.3.2 Conduct physical inventory
8.0.3.3 Identify high- and low-activity items
8.0.3.4 Maintain inventory records
8.0.3.5 Rotate stock
8.0.3.6 Identify value of Universal Product Code (UPC)**

Competency 8.0.4: Order merchandise*

Competency Builders:

8.0.4.1 Assess merchandise seasonality*
8.0.4.2 Determine what to order*
8.0.4.3 Determine quantity to order*
8.0.4.4 Determine when to order*
8.0.4.5 Use price lists and catalogs*
8.0.4.6 Prepare stock orders*
8.0.4.7 Prepare purchase orders*
8.0.4.8 Make maximum use of vendor discounts*
8.0.4.9 Calculate shipping charges*
8.0.4.10 Recognize value of wholesale brokers**

Competency 8.0.5: Supervise and manage labor

Competency Builders:

8.0.5.1 Determine amount of labor needed
8.0.5.2 Prepare for periods of peak work loads
8.0.5.3 Maintain clean, safe working environment
8.0.5.4 Recognize importance of efficient and quality work
8.0.5.5 Plan work priorities
8.0.5.6 Train and educate workers
8.0.5.7 Utilize labor efficiently for maximum profit
8.0.5.8 Evaluate worker performance
8.0.5.9 Identify job disciplinary measures
8.0.5.10 Recommend and recognize skills of workers
8.0.5.11 Motivate workers
8.0.5.12 Build rapport among workers
8.0.5.13 Communicate with management

(continued)

(continued)

8.0.5.14 Identify rationale for chain of command
8.0.5.15 Hire workers*
8.0.5.16 Evaluate hiring labor versus contracting services*

Unit 9: Employability Skills
Subunit 9.1: Career Development

Competency 9.1.1: Investigate career options

Competency Builders:

9.1.1.1 Determine interests and aptitudes
9.1.1.2 Identify career options
9.1.1.3 Research occupations matching interests and aptitudes
9.1.1.4 Select career(s) that best match(es) interests and aptitudes
9.1.1.5 Identify advantages and disadvantages of career options, including nontraditional careers
9.1.1.6 Assess differences in wages, annual incomes, and job opportunities based on geographic location
9.1.1.7 Develop a career plan

Competency 9.1.2: Analyze potential barriers to employment

Competency Builders:

9.1.2.1 Identify common barriers to employment
9.1.2.2 Describe strategies to overcome employment barriers

Unit 9: Employability Skills
Subunit 9.2: Decision Making and Problem Solving

Competency 9.2.1: Apply decision-making techniques in the workplace

Competency Builders:

9.2.1.1 Identify the decision to be made
9.2.1.2 Compare alternatives
9.2.1.3 Determine consequences of each alternative
9.2.1.4 Make decisions based on values and goals
9.2.1.5 Evaluate the decision made

Competency 9.2.2: Apply problem-solving techniques in the workplace

Competency Builders:

9.2.2.1 Diagnose the problem and its causes
9.2.2.2 Identify alternatives and their consequences in relation to the problem
9.2.2.3 Examine multicultural and nonsexist dimensions of problem solving
9.2.2.4 Utilize resources to explore possible solutions to the problem
9.2.2.5 Compare and contrast the advantages and disadvantages of each solution
9.2.2.6 Determine appropriate action
9.2.2.7 Evaluate results

Unit 9: Employability Skills

Subunit 9.3: Work Ethic

Competency 9.3.1: Evaluate the relationship of self-esteem to work ethic

Competency Builders:

9.3.1.1 Identify special characteristics and abilities in self and others
9.3.1.2 Identify internal and external factors that affect self-esteem

Competency 9.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace

Competency Builders:

9.3.2.1 Distinguish between values and goals
9.3.2.2 Determine the importance of values and goals
9.3.2.3 Evaluate how values affect goals
9.3.2.4 Identify short-term and long-term goals
9.3.2.5 Prioritize personal goals
9.3.2.6 Describe how personal values are reflected in work ethic
9.3.2.7 Describe how interactions in the workplace affect personal work ethic
9.3.2.8 Examine how life changes affect personal work ethic

Competency 9.3.3: Demonstrate work ethic

Competency Builders:

9.3.3.1 Examine factors that influence work ethic
9.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

Unit 9: Employability Skills
Subunit 9.4: Job-Seeking Skills

Competency 9.4.1: Prepare for employment

Competency Builders:

9.4.1.1 Identify traditional and nontraditional employment sources
9.4.1.2 Utilize employment sources
9.4.1.3 Research job opportunities, including nontraditional careers
9.4.1.4 Interpret equal employment opportunity laws
9.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
9.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

Competency 9.4.2: Design a résumé

Competency Builders:

9.4.2.1 Identify personal strengths and weaknesses
9.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
9.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
9.4.2.4 Complete résumé using various formats
9.4.2.5 Secure references

Competency 9.4.3: Complete and process job application forms

Competency Builders:

9.4.3.1 Explain the importance of an application form
9.4.3.2 Identify ways to obtain job application forms
9.4.3.3 Describe methods for handling illegal questions on job application forms
9.4.3.4 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
9.4.3.5 Return application to proper person, request interview, and follow up

Competency 9.4.4: Demonstrate interviewing skills

Competency Builders:

9.4.4.1 Investigate interview environment and procedures
9.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
9.4.4.3 Demonstrate question and answer techniques
9.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

* Advancing
** Futuring

Competency 9.4.5: Secure employment

Competency Builders:

9.4.5.1 Identify present and future employment opportunities within an occupation/organization
9.4.5.2 Research the organization/company
9.4.5.3 Use follow-up techniques to enhance employment potential
9.4.5.4 Compare and evaluate job offers

Unit 9: Employability Skills
Subunit 9.5: Job Retention Skills

Competency 9.5.1: Analyze the organizational structure of the workplace

Competency Builders:

9.5.1.1 Identify and evaluate employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
9.5.1.2 Be aware of and obey all company policies and procedures
9.5.1.3 Examine the role/relationship between employee and employer
9.5.1.4 Recognize opportunities for advancement and reasons for termination

Competency 9.5.2: Maintain positive relations with others

Competency Builders:

9.5.2.1 Exhibit appropriate work habits and attitude
9.5.2.2 Identify behaviors to establish successful working relationships
9.5.2.3 Cooperate and compromise through teamwork and group participation
9.5.2.4 Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age

Unit 9: Employability Skills
Subunit 9.6: Job Advancement

Competency 9.6.1: Analyze opportunities for personal and career growth

Competency Builders:

9.6.1.1 Determine opportunities within an occupation/organization
9.6.1.2 Compare and contrast other opportunities
9.6.1.3 List benefits of job advancement
9.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

* Advancing
** Futuring

Competency 9.6.2: Exhibit characteristics needed for advancement

Competency Builders:

9.6.2.1 Display a positive attitude
9.6.2.2 Demonstrate knowledge of a position
9.6.2.3 Perform quality work
9.6.2.4 Adapt to changing situations and technology
9.6.2.5 Demonstrate capability for different positions
9.6.2.6 Participate in continuing education/training programs
9.6.2.7 Respect, accept, and work with ALL individuals in the workplace

Unit 9: Employability Skills
Subunit 9.7: Technology in the Workplace

Competency 9.7.1: Assess the impact of technology in the workplace

Competency Builders:

9.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
9.7.1.2 Investigate the use of technology in the workplace
9.7.1.3 Analyze how present skills can be applied to learning new technologies

Competency 9.7.2: Use a variety of technological applications

Competency Builders:

9.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
9.7.2.2 Use technology to accomplish assigned tasks
9.7.2.3 Create solutions to problems using technical means

Unit 9: Employability Skills
Subunit 9.8: Lifelong Learning

Competency 9.8.1: Apply lifelong learning to individual situations

Competency Builders:

9.8.1.1 Define lifelong learning
9.8.1.2 Identify factors that cause the need for lifelong learning

Competency 9.8.2: Adapt to change

Competency Builders:

9.8.2.1 Analyze the effects of change
9.8.2.2 Identify reasons why goals change
9.8.2.3 Describe the importance of flexibility when reevaluating goals
9.8.2.4 Evaluate the need for continuing education/training

* Advancing
** Futuring

Unit 9: Employability Skills
Subunit 9.9: Economic Education

Competency 9.9.1: Analyze global enterprise system

Competency Builders:

9.9.1.1 Identify characteristics of various enterprise systems
9.9.1.2 Examine the relationship between competition, risk, and profit
9.9.1.3 Illustrate how supply and demand influence price

Competency 9.9.2: Evaluate personal money management

Competency Builders:

9.9.2.1 Describe the need for personal management records
9.9.2.2 Identify methods of taxation
9.9.2.3 Analyze how credit affects financial security
9.9.2.4 Compare types and methods of investments
9.9.2.5 Prepare a personal budget
9.9.2.6 Be an informed and responsible consumer
9.9.2.7 Analyze the effects of advertising on the consumer

Unit 9: Employability Skills
Subunit 9.10: Balancing Work and Family

Competency 9.10.1: Analyze the effects of family on work

Competency Builders:

9.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
9.10.1.2 Identify present and future family structures and responsibilities
9.10.1.3 Describe personal and family roles
9.10.1.4 Analyze concerns of working parent(s)
9.10.1.5 Examine how family responsibilities can conflict with work
9.10.1.6 Resolve family-related conflicts
9.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

Competency 9.10.2: Analyze the effects of work on family

Competency Builders:

9.10.2.1 Identify responsibilities associated with paid and nonpaid work
9.10.2.2 Compare the advantages and disadvantages of multiple incomes
9.10.2.3 Explain how work can conflict with family responsibilities
9.10.2.4 Explain how work-related stress can affect families
9.10.2.5 Identify family support systems and resources

Unit 9: Employability Skills
Subunit 9.11: Citizenship in the Workplace

Competency 9.11.1: Exercise the rights and responsibilities of citizenship in the workplace

Competency Builders:

9.11.1.1 Identify the basic rights and responsibilities of citizenship
9.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

Competency 9.11.2: Cooperate with others in the workplace

Competency Builders:

9.11.2.1 Identify situations in which compromise is necessary
9.11.2.2 Examine how individuals from various backgrounds contribute to work-related situations
9.11.2.3 Demonstrate initiative to facilitate cooperation
9.11.2.4 Give and receive constructive criticism to enhance cooperation

Unit 9: Employability Skills
Subunit 9.12: Leadership

Competency 9.12.1: Evaluate leadership styles appropriate for the workplace

Competency Builders:

9.12.1.1 Identify characteristics of effective leaders
9.12.1.2 Compare leadership styles
9.12.1.3 Demonstrate effective delegation skills
9.12.1.4 Identify opportunities to lead in the workplace

Competency 9.12.2: Demonstrate effective teamwork skills

Competency Builders:

9.12.2.1 Identify the responsibilities of a valuable group member
9.12.2.2 Exhibit open-mindedness
9.12.2.3 Identify methods of involving each member of a team
9.12.2.4 Contribute to the efficiency and success of a group
9.12.2.5 Determine ways to motivate others

* Advancing
** Futuring

Competency 9.12.3: Utilize effective communication skills

Competency Builders:

9.12.3.1 Identify the importance of listening
9.12.3.2 Demonstrate assertive communication
9.12.3.3 Recognize the importance of verbal and nonverbal cues and messages
9.12.3.4 Analyze written material
9.12.3.5 Prepare written material
9.12.3.6 Give and receive feedback
9.12.3.7 Articulate thoughts
9.12.3.8 Use appropriate language

Unit 9: Employability Skills

Subunit 9.13: Entrepreneurship

Competency 9.13.1: Evaluate the role of small business in the economy

Competency Builders:

9.13.1.1 Identify the benefits of small business to a community
9.13.1.2 Analyze opportunities for small business in a community

Competency 9.13.2: Examine considerations of starting a business

Competency Builders:

9.13.2.1 Research a business idea
9.13.2.2 Compare various ways to become a small business owner
9.13.2.3 Investigate factors to consider in financing a new business
9.13.2.4 Evaluate entrepreneurship as a career option

Distributed by

Vocational Instructional Materials Laboratory
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210-1090

BEST COPY AVAILABLE